Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for presenting event associations between events from one or more event flows on a display screen of a computer, comprising:

constructing a sequence diagram representation, wherein the sequence diagram representation comprises a top node associated with a machine or a process;

generating event pairs between the events from the one or more event flows, wherein said sequence diagram representation ~~having~~ comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein said sequence diagram representation comprises a higher level and a lower level, wherein a user drills down from the top node associated with the higher level to the lower level in the sequence diagram representation to view the events; and

displaying said sequence diagram representation on said display screen.

2. (Currently Amended) The method of claim 1 further comprising providing a graphical user interface for selecting a level of detail for said sequence diagram representation;

and wherein the higher level and the lower level comprise at least one process level sequence diagram, at least one thread level sequence diagram, at least one class level sequence diagram, and at least one object level sequence diagram.

3. (Currently Amended) The method of claim 2, wherein content for said level of detail is established by a predetermined relationship model for said event flows;

responsive to the user clicking on the top node assigned to the machine or the process, linking to the lower level.

4. (Currently Amended) The method of claim 1 further comprising generating said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters;

the sequence diagram representation presents event associations from multiple logs; and

non-associated events are excluded by filtering the non-associated events.

5. (Original) The method of claim 4 wherein said predetermined parameters include time of occurrence.

6. (Original) The method of claim 1 wherein said event flows are logs.

7. (Currently Amended) The method of claim 1 wherein said sequence diagram is a universal modelling language ("UML") sequence diagram.

8. (Currently Amended) A system for presenting event associations between events from one or more event flows on a display screen, said system including memory and an input device, said system comprising:

a processor coupled to said display, memory, and input device and adapted for:

constructing a sequence diagram representation wherein the sequence diagram representation comprises a top node associated with a machine or a process;

generating event pairs between the events from the one or more event flows, wherein said sequence diagram representation ~~having~~ comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein said sequence diagram representation comprises a higher level and a lower level, wherein a user drills down from the top node associated with the higher level to the lower level in the sequence diagram representation to view the events and the event pairs; and

displaying said sequence diagram representation on said display screen.

9. (Currently Amended) The system of claim 8 further comprising a graphical user interface for selecting a level of detail for said sequence diagram representation;

and wherein the higher level and the lower level comprise at least one process level sequence diagram, at least one thread level sequence diagram, at least one class level sequence diagram, at least one object level sequence diagram.

10. (Currently Amended) The system of claim 9 wherein content for said level of detail is established by a predetermined relationship model for said event flows;

responsive to the user clicking on the top node assigned to the machine or the process, linking to the lower level.

11. (Currently Amended) The system of claim 8 wherein said processor is adapted for generating said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters; and

the sequence diagram representation presents event associations from multiple logs; and non-associated events are excluded by filtering the non-associated events.

12. (Original) The system of claim 11 wherein said predetermined parameters include time of occurrence.

13. (Original) The system of claim 8 wherein said event flows are logs.

14. (Currently Amended) The system of claim 8, wherein said sequence diagram is a UML sequence diagram.

15. (Currently Amended) A computer program product having a recordable-type computer readable medium tangibly embodying computer executable code for presenting event associations between events from one or more event flows on a display screen, said computer program product comprising:

code for constructing a sequence diagram representation wherein the sequence diagram representation comprises a top node associated with a machine or a process;

generating event pairs between the events from the one or more event flows, wherein said sequence diagram representation ~~having~~ comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein said sequence diagram representation comprises a higher level and a lower level, wherein a user drills down from the top node associated with the higher level to the lower level in the sequence diagram representation to view the events and the event pairs; and

displaying said sequence diagram representation on said display screen.

16. (Currently Amended) The computer program product of claim 15 further comprising code for providing a graphical user interface for selecting a level of detail for said sequence diagram representation;

and wherein the higher level and the lower level comprise at least one process level sequence diagram, at least one thread level sequence diagram, at least one class level sequence diagram, and at least one object level sequence diagram.

17. (Currently Amended) The computer program product of claim 16 wherein content for said level of detail is established by a predetermined relationship model for said event flows;

responsive to the user clicking on the top node assigned to the machine or the process, linking to the lower level.

18. (Currently Amended) The computer program product of claim 15 further comprising code for generating said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters; and

the sequence diagram representation presents event associations from multiple logs; and non-associated events are excluded by filtering the non-associated events.

19. (Original) The computer program product of claim 18 wherein said predetermined parameters include time of occurrence.

20. (Original) The computer program product of claim 15 wherein said event flows are logs.

21. (Currently Amended) The computer program product of claim 15 wherein said sequence diagram is a UML sequence diagram.

22. (Currently Amended) An apparatus for presenting event associations between events from one or more event flows on a display screen of a computer, said apparatus comprising:

a memory;

software modules resident in the memory, wherein the software modules comprise programming instructions;

a processing unit, wherein the processing unit executes programming instructions to construct a sequence diagram representation, wherein the sequence diagram representation comprises a top node associated with a machine or a process;

a processing unit, wherein the processing unit executes programming instructions generating event pairs between the events from the one or more event flows, wherein said sequence diagram representation comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein said sequence diagram representation comprises a higher level and a lower level, wherein a user drills down from the top node in the higher level to the lower level in the sequence diagram representation to view the events and the event pairs; and

displaying said sequence diagram representation on said display screen. ~~An article having a computer readable modulated carrier signal being usable over a network, and having means embedded in~~

~~the computer readable modulated carrier signal for presenting event associations between events from one or event flows on a display screen, said article comprising:~~

~~means in the medium for constructing a sequence diagram representation, said representation having timelines for said event flows and directional paths between said timelines for said event associations; and [[,]] means in the medium for displaying said representation on said display.~~

23. (Currently Amended) The apparatus ~~The article~~ of claim 22 further comprising an interface ~~means in the medium for~~ providing a graphical user interface for selecting a level of detail for said sequence diagram representation;

and wherein the higher level and the lower level comprise at least one process level sequence diagram, at least one thread level sequence diagram, at least one class level sequence diagram, and at least one object level sequence diagram.

24. (Currently Amended) The apparatus ~~article~~ of claim 23 wherein content for said level of detail is established by a predetermined relationship model for said event flows;

responsive to the user clicking on the top node assigned to the machine or the process, linking to the lower level.

25. (Currently Amended) The apparatus ~~article~~ of claim 22 further comprising the software modules wherein the software modules generate ~~means in the medium for generating~~ said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters; and

the sequence diagram representation presents event associations from multiple logs; and

non-associated events are excluded by filtering the non-associated events.

26. (Currently Amended) The apparatus ~~article~~ of claim 25 wherein said predetermined parameters include time of occurrence.

27. (Currently Amended) The apparatus ~~article~~ of claim 22 wherein said event flows are logs.

28. (Currently Amended) The apparatus ~~article~~ of claim 22 , wherein said sequence diagram is a UML sequence diagram.